

# HHE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE; PRESENTS SHALL COME:

Hioneer Hi-Bred International, Inc.

DICTORS, THERE HAS BEEN PRESENTED TO THE

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY  ${
m LAW}$  , THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR ORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE E, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT DBY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

*SOYBEAN* 

'91M60'

In Testimone Mucrost, I have hereunto set my hand and caused the seal of the Plant Dariety Protection Office to be affixed at the City of Washington, D.C. this fifteenth day of June, in the year two thousand and five.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2428).

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) Application is (7 U.S.C. 242)

(Instructions and Information colle	ction burden statement on rev	/erse)				·	
NAME OF OWNER Pioneer Hi-Bred Intel		TEMPORARY DESIGNAT EXPERIMENTAL NAME  XB16Q04		3. VARIETY NAME 91M60			
4. ADDRESS (Street and No., or R.F.D. No. 7300 N. W. 62 <sup>rt</sup> Avenue P.O. Box 1004 Johnston, IA 50131		5. TELEPHONE (include area code 515-254-2638		FOR OFFICIAL USE ONLY  PYRONUMBER 7 7			
				6. FAX (include area code) 515-253-2478		FILING DATE	
IF THE OWNER NAMED IS NOT A "PER ORGANIZATION (corporation, partnership Corporate	SON", GIVE FORM OF o, association, etc.)	8. IF INCORPORA STATE OF INCO lowa	ATED, GIVE ORPORATION  9. DATE OF INCORPORATION  May 6, 1926			1/18/2005	
10. NAME AND ADDRESS OF OWNER R Daria Schmidt, Ph. D. 7300 N.W. 62 <sup>rd</sup> Avenue P.O. Box 1004 Johnston IA 50131-1004	-irst person listed wi	il receive all papers)		FILING AND EXAMINATION FEES:  \$3,652.00  DATE 1/18/2005  CERTIFICATION FEE:  \$ 432  DATE 5/1/2005			
11. TELEPHONE (Include area code) 515-254-2638	45.054.0000			WAIL  14. CROP KIND (Commo  Soybean			
<ul> <li>18. CHECK APPROPRIATE BOX FOR EACH reverse)</li> <li>a.  X Exhibit A. Origin and Breeding</li> <li>b.  X Exhibit B. Statement of Disting</li> <li>c.  X Exhibit C. Objective Descript</li> <li>d.  X Exhibit D. Additional Descript</li> </ul>	19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act)  YES (If "yes", answer items 20						
e. X Exhibit E. Statement of the B  f. X Voucher Sample (2,500 viable verification that tissue culture was repository)  g. X Filing and Examination Fee (3 States" (Mail to the Plant Variety)	pproved public	21. DOES THE OWNER SPECIFY THAT THE CLASSES BE LIMITED AS TO NUMBER OF GENERATIONS?  IF YES, SPECIFY THE NUMBER 1, 2, 3, etc.  FOUNDATION REGISTERED CERTIFIED  (If additional explanation is necessary, please use the space indicated on the reverse.)					
22. HAS THE VARIETY (INCLUDING ANY HAF FROM THIS VARIETY BEEN SOLD, DISP OTHER COUNTRIES?  YES  IF YES, YOU MUST PROVIDE THE DATE FOR EACH COUNTRY AND THE CIRCUIT	23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELL ECTUAL						
24. The owners declare that a viable sample of for a tuber propagated variety a tissue cult.  The undersigned owner(s) is(are) the owner and is entitled to protection under the provious owner(s) is(are) informed that false repres	er of this sexually reproduced or tuber i isions of Section 42 of the Plant Variet	propagated plant varion Protection Act.	ety, and believe(s) th	ed upon request in accordance ve e certificate. nat the variety is new, distinct, un	with such regula	tions as may be applicable, or e as required in Section 42,	
David H. Sch	SIGNATURE OF OWNER						
NAME ( <i>Please print or type</i> ) Paria H. Schmidt	NAME (Please print or type)						
CAPACITY OR TITLE  Director, Technology Integration and Associative	CAPACITY OR TITLE DATE						

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items and application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

#### ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
  - (1) identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance. etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)
- U.S. Patent 4,940,835 issued to Shah et al. as per the Roundup Ready Gene in this variety

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces ST-470 (02-99) which is obsolete.

#### Exhibit A. Origin and Breeding History of the Variety

Soybean Variety 91M60

Variety 91M60 evolved from a cross made in the summer of 1997 in Minnesota with the following parentage:

9151/91B64\*

\*91B64 is a commercial line with the Roundup Ready (40-3-2) gene

Variety 91M60 is an F3-derived line which was advanced to the F3 generation by modified single-seed descent. The F3 progeny row of 91M60 was grown in a plant row in the summer of 1999 in Minnesota. Subsequently, 91M60 has undergone five years of extensive testing and purification and has been observed by the breeder to be uniform and stable for all plant traits from generation to generation, with no evidence of variants. On the basis of yield, Phytophthora resistance and resistance to Roundup labeled herbicides, variety 91M60 was assigned a commercial number.

The purification block was grown during the summer of 2002 in Minnesota and 56 sublines were harvested. An approximately half (1/2) acre increase was grown in Chile in the winter of 2002/03. Sixteen (16) acres of parent seedstock (foundation seed equivalent) were grown in 2003 and approximately 350 acres of seedstock and production seed were grown in the summer of 2004

#### **Exhibit B.** Statement of Distinctness

Soybean Variety 91M60

Variety 91M60 is most similar to variety 91B64. Both varieties have purple flowers, tawny pubescence, black hila, resistance to *Phytophthora megasperma* as governed by the Rps1c gene, and resistance to Roundup branded herbicides. However, 91M60 has alleles 3 and 1 at the isozyme loci ACO4 and IDH1, respectively, whereas 94B33 has alleles 1 and 2 at the isozyme loci ACO4 and IDH1, respectively.

	ACO2	ACO3	ACO4	ACP	DIA	ENP	IDH1	IDH2	MDH	MPI	PGM1
91M60	2	1	3	Α	Α	Α	1	1	В	В	2
91B64	2	1	1	Α	Α	Α	2	1	В	В	2

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data ources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326 (whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

EXHIBIT C (Soybean)

			ECTIVE DESCR SOYBEAN ( <i>Glyc</i> i							
NAME OF APPLICANT(S) Pioneer Hi-Bred, Internationa	F	FOR OFFICIAL USE ONLY								
ADDRESS (Street and No. or		and Zip Cod			i	2 00 5	0	00	7	
P.O Box 1004 Johnston, IA 50131-1004		. •			1	ARIETY NAME				
					7 1	EMPORARY OR I	} \$>	IMENTA		1+15
PLEASE READ ALL I Place a zero in the first quantitative		0 0	or $\begin{bmatrix} 0 & 9 \end{bmatrix}$		ne varietal characte ther 99 or less or 9					<i>0</i> 00,
plant characters chould	l be based on a mi	nimum of 100 plants	. Comparative data s	hould be determined	l from varieties ente	ered in the sam	e tria	l. Roya	ıl	
Horticulutral Society of Please answer all questi				•	te system used:			.*		
A. MORPHOL	OGY									
Seed Shape:										
12 1	pherical , L/T, and T/W	/ ratios < 1.2)		erical - Flattened atio > 1.2; L/T ra						
	longated ratio . 1.2; T/V	V ratio < 1.2)		ngate - Flattened tio > 1.2;T/W rat						
Seed Coat Color	r:			·						
1	1 = Yellow	2 = Green	3 = Brown	4 = Black	5 = Other					
Seed Coat Luste					(Please Spe	cify		•		
1	1 = Dull	2 = Shiny								
Seed Size:			**							
14.6	grams/100 seed	ds								
Hilum Color:				•						
6	1 = Buff	2 = Yellow	3 = Brown	4 = Gray	5 = Imperfe	ct Black				
	6 = Black	7 = Other (Pl	ease Specify)							

#### A. MORPHOLOGY (Continued)

2005000 73

**Cotyledon Color:** 

1

1 = Yellow

2 = Green

Seed Protein Peroxidase Activity:

1 = Low

2 = High

Hypocotyl Color:

1 = Green ('Evans' or 'Davis') 2 = Green with Bronze **Bands below Cotyledons** 

3 = Light Purple below Cotyledons

unifoliolate leaves ('Hodgson', 'Coker', or

4 = Dark Purple extending to

('Woodworth' or 'Tracy')

('Beeson' or 'Pickett 71')

Leaflet Shape:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Please Specify)

Flower Color:

1 = White

2 = Purple

3 = White with a Purple Throat

**Pod Color:** 

2

1 = Tan

2 = Brown

3 =Black

**Pubescence Color:** 

1 = Gray

2 = Brown (Tawny)

3 =Light Tawny

Plant Habit:

1 = Determinate

2 = Semi - Determinate

3 =Indeterminate

4 =Intermdeiate

**Maturity Group:** 

04

1 = 000

2 = 00

3 = 0

4 = I

5 = II

 $6 = \mathbf{III}$ 

7 = IV

8 = V

9 = VI

10 = VII

11 = VIII

12 = IX

13 = X

14 = XI

15 = XII

**Maturity Subgroup:** 

Please enter a value from 0 - 9

**B. DISEASE REACTION** 

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Tolerant

**Bacterial** 

0

Bacterial Pustule (Xanthomonas campestri pv. glycines (Nakano) Dye)

Bacterial Blight Pseudomonas syringa pv. glycinea (Coerper) Young, Dye, and Wilkie)

0

Wildfire Blight Pseudomonas syringa pv. tabaci (Wolf Foster) Young, Dye, Wilkie)

). DIS	EASE REACTION	(Continuea)	v = Not Tested	1 = Suscepu	bie 2 = Kesistant	3 = Tolerant			
Fung 1	al Brown Spot <i>(Septor</i>	ia glycinesHemmi)	·						
	Frogeye Leaf Spot (	Cercospora sojina	Hara)	e e e e e e e e e e e e e e e e e e e					
0	race 1	0 race 2		0 ra	ce 3	0 race 4			
0	race 5	0 race 6		0 0	the (Please Specify)				
0	Target Spot (Corynespora cassiicola (Berk. Curt.) Wei)								
Downey Mildew (Peronospora trifoliorum var. manchurica (Naum.) Syd. ex Gäum)									
0	Powdery Mildew (Mid	crosphaera diffusa	Cke. and Pk.)						
0	Brown Stem Rot (Ph	ialophora gregata	(Allington Char	nberlain) W. (	Gams.)				
0	Stem Canker (Diaporthe phaseolorum (Cke. and Ell.) Sacc. var. caulivora Athow and Caldwell)								
1	Pod and Stem Blight	(Diaporthe phase	olorum (Cke. and	Ell.) Sacc. va	r. <i>sojae</i> (Lehman) Weh	m.			
0	Purple Seed Stain (	Cercospora kikuci	hii (T. Matsu. an	d Tomoyasu) (	Gardener)	·			
1	Rhizoctonia Root Rot	(Rhizoctonia sol	lani Kühn)	÷	·				
Phytop	ohthora Root Rot (Phyto	phthora megasper	ma Drechs. f. sp.	glycinea (Kı	uan _Erwin))				
0	race 1	race 8	0 race 15	0	race 22				
0	race 2	race 9	0 race 16	0	race 23				
0	race 3	race 10	0 race 17	0	race 24				
1	race 4	race 11	0 race 18	0	race 25				
0	race 5	race 12	0 race 19	0	race 26				
0	race 6	race 13	0 race20	0	Other (Please Special	fy)			
2	race 7	race 14	0 race 21	·.					
1	Bud Blight (Tobacco R	lingspot Virus)		•					
1	Yellow Mosaic (bean Y	Yellow Mosaic Vir	rus)						

200500073

B. DI	SEASE REACTIONS (Continued) $0 = Not Tested$ $1 = Susceptible$ $2 = Resistant$	3 = Tolerant
Fung		·
1	Cowpea Mosaic (Cowpea Chlorotic Virus)	· ·
1	Pod Mottle (Bean Pod Mottle Virus)	
1	Seed Mottle (Soybean Mosaic Virus)	
Nema		
Soyb	ean Cyst Nematode (Heterodera glycines Ichinohe)	
0	race 1 0 race 9	
0	race 2 0 race 5 0 race 14	
0	race 3 0 race 6 0 Other (Please Specify)	
0	Lance Nematode (Hoploaimus columbus Sher)	
0	Southern Root Knot Nematode (Meloidogyne incognita (Kofoid and White) Chitwo	
0	Northern Root Knot Nematode (Meloidogyne hapla Chitwood)	
0	Peanut Root Knot Nematode (Meloidogyne arenaria (Neal) Chitwood)	s.
0	Reniform Nematode (Rotylenchus reniformus Linwood and Olivera)	
0	Javanese Nematode (Meloidogyne javanica (Treub) Chitwood)	
0	Other Nematode (Please Specify) 0	
. PH	YSIOLOGICAL RESPONSES 0 = Not Tested 1 = Susceptible 2 = Resistant	3 = Tolerant
0	Iron Chlorosis on Calcareous Soil	
0	Phosphorus Other (Please Specify)	
0	Boron	
0	Aluminum	
0	Salt	
0	Drought	

D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2005 ( 2 = Resistant	JUU/3 3 = Tolerant
Fungal				•
Mexican Bean Beetle (Epilachno	ı varivestis Mulsant)			
O Potato Leaf Hopper (Empoasca)	fabae (Harris))			
Other (Please Specify)				
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	
0 Metribuzin				
0 Bentazone				
1 Sulfonylurea				
2 Glyphosate				
0 Glufosinate				. •
0 Pendimethalin				
Other (Please Specify) 0		·		
F. TRANSGENIC COMPOSITION				
Has the development of the subject variety in the removal of genetic material from the appl	cluded the insertion of lication variety?	genetic material fi	rom an organism otl	ner than a soybean, or,
If yes, please complete the following infomation	on requests*. Use addi	tional pages if nec	essary.	
1. Please state the vector's name:				
2. Please state the vector components:				
3. Please describe the genetic material success	sfully transferred into	the subject variety	•	
4. Please describe the insertion protocol:				
* A literature citation(s) explaining the for "Transgenic Composition" portion of this for the vector components and insert elements are Development, Identification, and Characteriza	m. This section is fully e summarized in Figure	y addressed in the e 1 and Table 1 on	following publication page 1453. Padgett	n. Specific details of e. S.R. et al.
G. BIOCHEMICAL MARKERS		,	<u></u>	<u> </u>
Please describe any biochemical information les Simple Sequences Repeats, Restriction Fragmenecessary.	nere, which you believe ent Length Polymorph	will be helpful in issus, Isozymic Ch	further describing t aracterization). Us	he subject variety (e.g. e additional pages if

• H. COMMENTS

### Exhibit D. Additional Description of the Variety

#### Soybean Variety 91M60

In Exhibit C we have identified variety 91M60 as susceptible to bacterial blight, brown spot, pod and stem blight, rhizoctonia root rot, bud blight, yellow mosaic, cowpea mosaic, pod mottle and seed mottle.

This does not mean that variety 91M60 is any worse for these problems than other varieties of similar maturity. Rather, we do not consider 91M60 to be immune to these problems. Therefore, we have chosen to be conservative and have identified the line as "susceptible".

Variety 91M60 is a mid Group 1 variety. If Group 1 varieties are divided into tenths, the relative maturity of 91M60 is 1.6.

Additionally, 91M60 has the following oil and protein composition. These mean values are determined by conventional NIR (near infrared) analysis conducted on samples from multi-year, multi-location replicated trials

Trait	Mean Value
Seed Protein (% at dry weight basis)	39.2
Seed Protein (% at 13% moisture)	34.6
Seed Oil (% at dry weight basis)	21.4
Seed Oil (% at 13% moisture)	19.0

REPRODUCE LOCALLY. Include form number and edition date on a	Il reproductions	FORM APPROVED - OMB No. 0581-005
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE		in accordance with the Privacy Act of
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to de certificate is to be issued (7 U.S.C. confidential until the certificate is iss	2421). The information is held
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	2. VARIETY NAME
Pioneer Hi-Bred International, Inc	OR EXPERIMENTAL NUMBER	91M60
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
7300 N.W. 62 <sup>nd</sup> Avenue P.O. Box 1004 Johnston, IA 50131-1004	515-254-2638	515-253-2478
Commission, IA 30131-1004	7. PVPO NUMBER 200	5000 73
8. Does the applicant own all rights to the variety? Mark an "X" in the lf no, please explain.	ne appropriate block.	X YES NO
9. Is the applicant (individual or company) a U.S. National or a U.S. If no, give name of country	based company?	X YES NO
10. Is the applicant the original owner?	If no, please answer one of the fo	ollowing:
a. If the original rights to variety were owned by individual(s), is		nol/o\9
YES NO If no, give name of count		nal(s):
	•	
b. If the original rights to variety were owned by a company(ies		ased company?
YES NO If no, give name of count	ry	
11. Additional explanation on ownership (If needed, use the reverse	for extra space):	
Please Note:		
Plant variety protection can only be afforded to the owners (not licen	sees) who meet the following criteria:	
<ol> <li>If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals of</li> </ol>	person must be a U.S. national, national of the U.S. for the same genus and specific	of a UPOV member country, or cies.
<ol><li>If the rights to the variety are owned by the company which emplo nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>	yed the original breeder(s), the compar country which affords similar protection	ny must be U.S. based, owned by a to nationals of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must	meet one of the above criteria.
The original breeder/owner may be the individual or company who di Act for definitions.	irected the final breeding. See Section	41(a)(2) ot the Plant Variety Protection
According to the Paperwork Reduction Act of 1995, no persons are required to respond to a for this information collection is 0581-0055. The time required to complete this information instructions, searching existing data sources, gathering and maintaining the data needed, a	collection is estimated to average 6 minutes per resi	ponse, including the time for reviewing the
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